

1434

THOUGHTS AND FACTS

RELATING TO THE

I N C R E A S E

OF

Agriculture, Manufactures and Commerce,

BY THE EXTENSION OF

INLAND NAVIGATION IN IRELAND.

WHEREIN IS CONSIDERED,

THE PROPRIETY OF DIRECTING INTO CHANNELS, MORE
PRODUCTIVE OF PERMANENT IMPROVEMENT, THE
BOUNTIES NOW PAID ON THE INLAND AND
COAST CARRIAGE OF CORN TO DUBLIN.

BY

R
RICHARD GRIFFITH, ESQ. M. R. I. A.

"To scatter plenty o'er a smiling land."

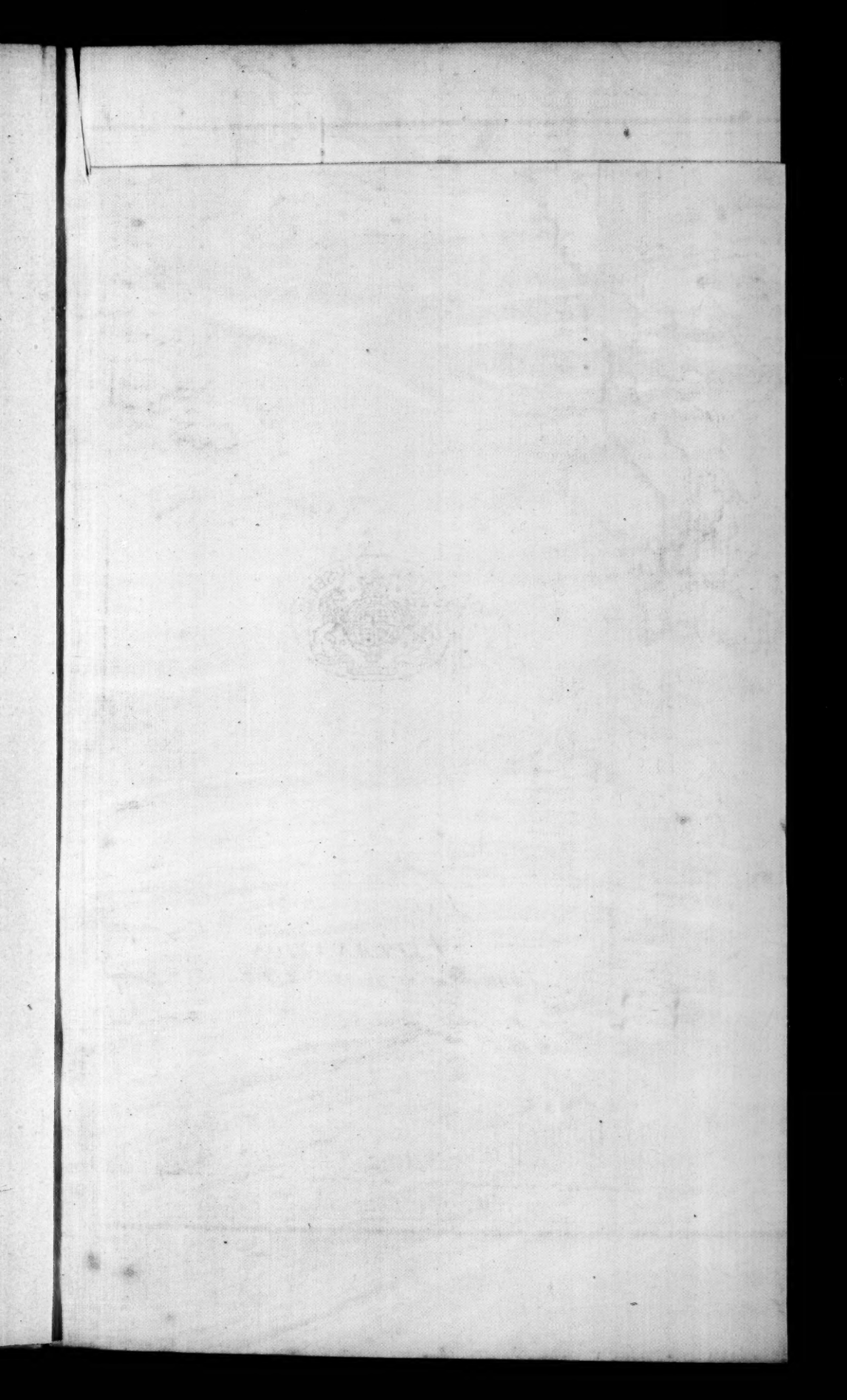
GRAY.

DUBLIN:

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1795.





A MAP OF
IRELAND

SHEWING the number, and extent of its RIVERS,
with the present, and proposed Lines of
INLAND NAVIGATION.

1795

ATLANTIC

OCEAN

THE NORTH CHANNEL

IRISH SEA

S^t. GEORGES CHANNEL

EXPLANATION.

Present Canals are described thus
Proposed Canals thus

SCALES

Irish Miles

English Miles

6 Degrees W. Long. from Greenwich Observatory.

TO HIS EXCELLENCY,
WILLIAM EARL OF FITZWILLIAM,
LORD LIEUTENANT GENERAL AND GENERAL
GOVERNOR OF IRELAND.

THESE Observations are inscribed with that respect, to which his Excellency's many public and private virtues lay a just claim from every individual, but to which, he is more particularly entitled from every Irishman, by the earnest he has given of a determination to promote the internal improvement of this country, by His Excellency's

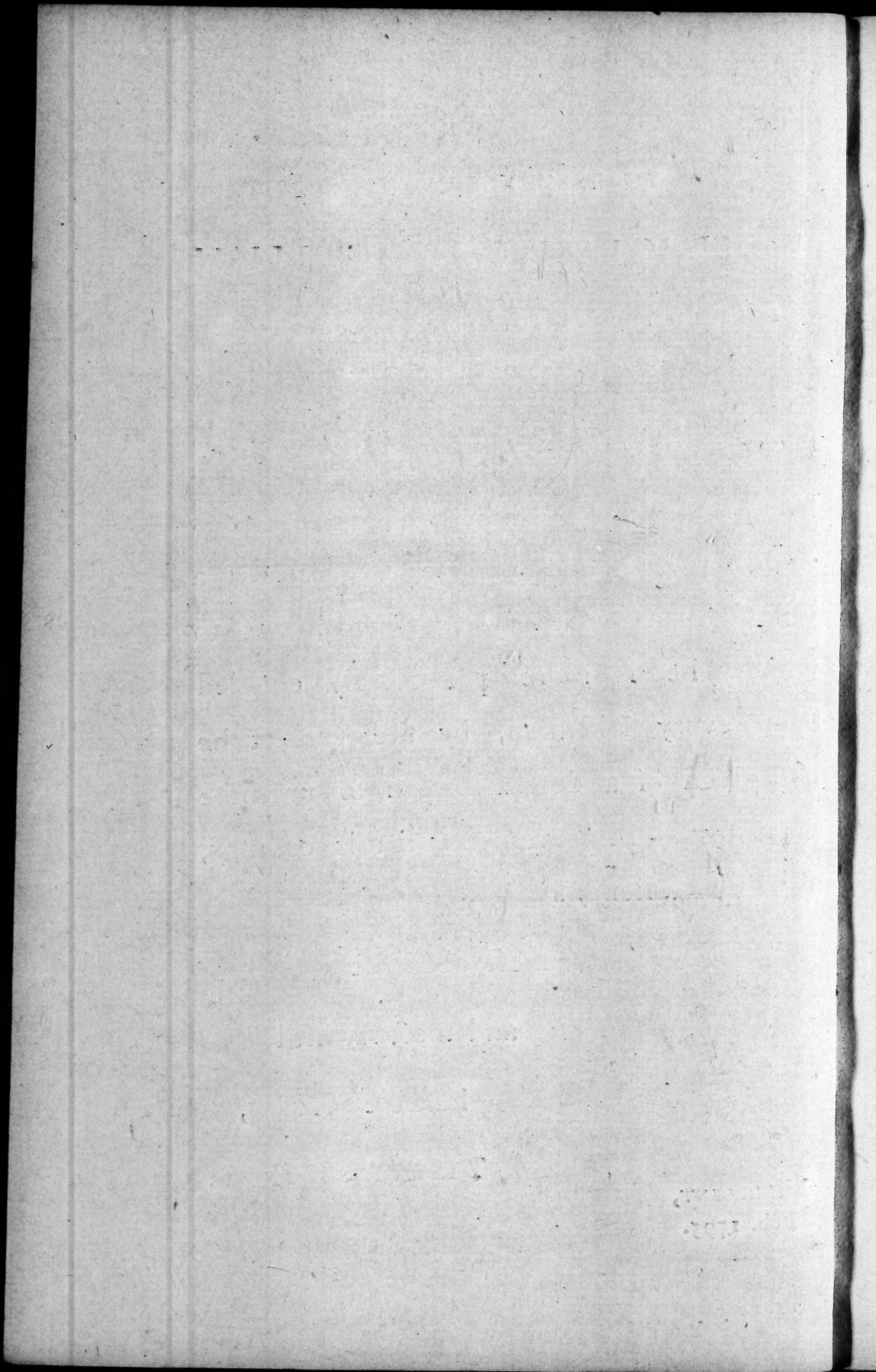
most obedient

and most faithful

humble Servant,

THE AUTHOR.

MILLECENT,
Feb. 1795.



THOUGHTS AND FACTS, &c.

THERE is no passion more deeply implanted in the heart of man than the love of his native country, independent of any immediate advantage he may hope to derive from its welfare—Pride, self-love, and vanity, are all concerned in maintaining the dignity of our nation abroad.—Philanthropy, joined with every noble and generous sentiment, conspires to engage us in promoting its internal improvement, and in enlarging the scale of comfort among our fellow-subjects. Whoever points his researches to objects so worthy of public attention, though his endeavours may be humble, they cannot be inglorious; and he may be assured of finding a ready advocate in the heart of every wife and every honest man.

No country in Europe is so happily situated for carrying on an extensive commerce as Ireland.
“ Placed between the old world and the new,
“ she is the natural emporium of both—her safe

“ and numerous harbours, her rivers, lakes—
 “ her plains, producing the richest pasture—her
 “ fields the most abundant crops—her hills and
 “ mountains abounding with mines—her coasts
 “ teeming with fish!”—Yet were the fortunate
 circumstances of soil and situation long beheld by
 us with indifference, because we were unable to
 avail ourselves of their advantages.—A happy re-
 volution in the public mind has followed that of
 the constitution of this country—Ireland, at length
 emancipated from the galling yoke of slavery,
 her legislature independent, her commerce unre-
 strained, and though last, not least, her people
 united by the abolition of all political distinctions,
 advances with a firm and determined step to claim
 her rank among surrounding nations; she is, at
 the same time, become sensible that it is only
 through the medium of perseverance and industry,
 that she can hope to obtain that degree of respect
 and consideration in the political scale, which she
 is desirous of possessing. The proper direction of
 national industry must however depend, in a great
 measure, upon the wisdom of her Parliament;
 it therefore becomes the duty of each individual
 to lay before the public every species of infor-
 mation which may tend to promote the general
 improvement of his country.

There is a perpetual competition and rivalry
 kept up between the different nations of Europe,
 each endeavouring to outstrip and supplant the
 other, by discoveries and improvements in agri-
 culture and manufactures, as well as in the finer

arts; hence the daily inventions of new machines to facilitate the works of labour, and to reduce their price, and hence the rapid progress of knowledge in every useful science.

One of the chief sources of vigour and wealth to a nation, is an easy and cheap communication from one part of it to another. It is by this means that a small spot of land, peopled with industrious subjects, is happier and more powerful than a large district, thinly scattered with inhabitants. The strength of the former, by being closely united, acts as one consistent body; but the riches and extent of the latter are of little service to the community, while its inhabitants are thrown at such a distance as to be unable to supply the wants of each other; and it sometimes happens in the most fertile countries, that the people of one district are supplied by foreigners, at a heavy expence, with those very articles which superabound in other parts of the same kingdom.

The natural course of civilization and improvement is from agriculture to arts.—Commerce is the certain result of both, and that nation, which in the present enlightened state of mankind, is so weak as to entertain a hope of arriving at wealth and power through any other gradation, will but too soon be sensible of the folly of the attempt, and will at length be obliged to revert to the divine order which God, through nature, has prescribed. Whatever therefore tends to promote and extend agriculture, may justly

justly be considered as the basis of national wealth.

An easy mode of throwing off the redundance of a market by exportation, is the sure means of having that market well supplied. A safe, quick, and cheap communication with such a market, is doubtless the greatest incentive that can be held out to a farmer to extend his tillage. The same inducement will encourage him to plant trees, because it secures a ready sale for his timber; and an easy conveyance of manure from adjacent, and even from distant towns, together with back carriage of gross materials, such as coals, turf, brick, and stones, which either lie as an incumbrance on his land, or are raised at a small expence, and produce a certain, though moderate profit, will tempt him to reclaim, improve, and enlarge. Bounties on the exportation of corn, when grain falls below a certain price, together with a ready and cheap conveyance to the sea, are the only means of laying a permanent foundation for the establishment of agriculture. Ireland has already begun to experience, in a small degree, the happy effects of these advantages; to extend and secure their influence is the sole object of this publication.

Inland navigation is the improvement above all others, which has given the most decided superiority, to the agriculture and commerce of those kingdoms wherein it has been judiciously encouraged; but though no country in the world is more fortunately circumstanced than Ireland for the promotion

promotion of this grand object, both in respect to the general levels in the interior parts, and the abundance of water with which this island is every where supplied, yet there is perhaps no modern improvement, the process and advantages of which were, till very lately, so little understood among us. It is remarkable too, that from the first settlement of the English in this country, the government appears to have been disposed to take advantage of the facility with which inland navigation might be extended in this island, and our statute books are crowded with laws intended to encourage this wise and important improvement—but the general ignorance which prevailed, the unsettled state of the country, the want of public credit, the spirit of jobbing (not yet entirely extinguished), together with the shackled state of our commerce and legislature, repressed the ardour of every advance towards national improvement, and these laws like many other specious regulations for public benefit, served but to mock our wretchedness. While our ports were closed by commercial restrictions and by repeated embargoes, it could be no object to the nation to obtain a cheap and easy mode of conveying the products of the interior country into our ports and harbours, from whence our merchants were prohibited to export them.

The parliament finding that there was neither capital nor spirit of adventure sufficient among the people to accomplish the great works

works which they had projected, at length appointed certain commissioners for this purpose, under the title of "The Corporation for promoting and carrying on an Inland Navigation in Ireland," and provided them with a fund of 8,000*l.* per annum. *The principal object of the institution being avowedly to open the navigation of the river Shannon at public expence.* Though this scheme was unquestionably founded in an honest and patriotic zeal for the public welfare, yet the plan and the executors of it, being both deficient in some very material requisites, it has unfortunately failed in producing any good effect. The truth of this assertion may be clearly evinced by comparing the large * amount of sums granted by parliament, with the inconsiderable portion of work performed, and by taking a view of the chance-medely manner in which the whole business was conducted. No less than twenty-three dif-

* From the 4th May, 1730, to 25th March, 1769, the commissioners expended, as appears by their printed accounts, — — — 460,665 3 8

From 25th March, 1769, to 25th December, 1785, they received from the Treasury, on account of the tillage duties at the rate of 7000*l.* per annum, from which deduct 500*l.* per annum, for charges of collection, there remains 6500*l.* per annum for 16½ years,—amounting to neat, 107,250 0 0

On the 25th December, 1785, the said commissioners had over-drawn their funds. Vide, Commons Journals, vol. ii. page 529. (*Note,* the Lagan duties from 1769, are not included 26,284 17 ½

£. 592,200 0 8½
ferent

ferent* works were undertaken nearly at the same time, and scarce any of them accomplished. The fable of the savage endeavouring to roast a hen with a faggot, stick by stick, was realized in the conduct of these commissioners. Every member had his favourite work, the fund was divided and subdivided into various channels, and at least one third of the whole expended in salaries to officers, whose interest it was to make their places perpetual by retarding the completion of the works, and the remainder in discount for money advanced, and in jobs to contractors whose accounts were never adjusted. If any one object had been steadily pursued, it might easily have been attained. If the river Shannon were to be made navigable, the commissioners surely ought to have begun at one end or the other. They should have commenced their operations at Lough Allen, which is surrounded by collieries and iron mines that are almost inexhaustible, and from whence they soon might have been enabled to have distributed coals in abundance through a very extensive tract of country. If not at Lough Allen, their first efforts, should have been

* 1. Newry canal—2. Tyrone old navigation—3. Tyrone new navigation—4. Shannon from Limerick to Killaloe—5. Shannon from Killaloe to the Source—6. Southern line—7. River Barrow—8. River Nore—9. River Lagan—10. Boyne from Drogheda to the Sea—11. Boyne from Drogheda to Navan—13. River Black-water—14. River Finisk (Dungarvan)—15. River Fergus—16. River Suir—17. River Lee—18. Navigation from Letterkenny to Lough Swilly—19. Canal from Muff to Lough Foyle—20. Six Mile Water—21. Wicklow Harbour—22. Bangor Pier—23. Bridges in the County of Kilkenny.

pointed at the other extremity, to the removal of the obstacles that presented themselves at Killaloe, by which means the grain and other productions of the circumjacent country might have been exported while the remaining works were prosecuted. But having neither plan nor object in view, they began in the centre of the river, so that every useful purpose of improvement must necessarily have been deferred till the last hour.

The waste of Parliamentary grants is perhaps the slightest part of the injury, which the nation has sustained by the ignorance of those, who were formerly entrusted with the management of inland navigation. An immoderate expenditure, together with repeated blunders and disappointments has sickened the public mind on the subject, and the odium due alone to the guilty, is by a natural, though unjust decree, transferred to the innocent. Inland Navigation has been condemned as a speculative and impracticable idea, because it has been miscondacted. But in truth the fault did not exist so much in the persons appointed, as in the mistaken policy of entrusting to commissioners works so various and intricate, requiring an *unremitted and minute superintendence*, during their formation, and even after they were perfected.*

Such

* “ In several different parts of Europe, the toll or lock
 “ duty upon a canal, is the property of private persons, whose
 “ private interest obliges them to keep up the canal. If it is
 “ not kept in tolerable order, the navigation necessarily ceases
 “ altogether,

Such an attention, it is to be feared, is not attainable through any other medium than that of self-interest; and therefore the only practicable means of promoting inland navigation in Ireland is by vesting it as a property, upon certain conditions, and under certain restrictions, in the hands of individuals or associated companies, and granting them such encouragement as may be found necessary to induce them to undertake works of this nature. The quantum of the bounty to be given by the public, should however be proportioned to the difficulty, expence, and magnitude of the undertaking, and should also bear some affinity to the rate of tolls allowed to be taken, as well as to the probable amount of such tolls, from the commerce likely to be transported on such navigation. But it has been asked, and indeed the question does not, at first sight, appear devoid of some shew of reason, Wherefore should bounties be granted in *Ireland* for carrying on an inland navigation, when it is well known that, in *England*, none are demanded, or even thought of? The

“altogether, and along with it, the whole profit which they can make by the tolls. If the tolls were put under the management of commissioners who had themselves no interest in them, they might be less attentive to the maintenance of the works which produced them. The canal of Languedoc, cost the king of France and the province, upwards of thirteen millions of livres, (900,000*l.* sterling) when that great work was finished, the most likely method, it was found, of keeping it in constant repair, was to make a present of the tolls to Requett, the engineer, who planned and conducted the work.”

An Inquiry into the Nature and Causes of the Wealth of Nations, by Adam Smith, vol. iii. page 94.

obvious answer to this objection is, that canals in *England* are the *effect* of internal wealth and population, an improved state of agriculture, manufactures, and commerce. In *Ireland* we must look to inland navigation as an efficient *cause* of producing, or at least as the best means of facilitating those happy effects.— In *England* it is almost impossible to extend a canal ten miles in any direction without intersecting two, three, or more populous and manufacturing towns. In *Ireland* it *may be expected*, that in the process of a few years, manufacturing towns *may* be raised on the banks of our navigable waters. Give me leave further to add, that if the Parliament of *England* had granted bounties on the several canals made in that country, on condition of keeping down the tolls of such canals on the carriage of the necessaries of life, it would have acted wisely. In truth the grand principle of inland navigation seems not to have been sufficiently attended to, either in *Great Britain* or *Ireland*. That principle is “to render the produce of land as great and as valuable as possible, by procuring for it as extensive a market as possible by the establishment of the freest, the easiest, and the least expensive communication between the different parts of the country, which can be done only by means of the best roads or the best navigable canals.” *

To this end all the great navigations should have been made solely at the public expense,

* An Inquiry into the Nature and Causes of the Wealth of Nations, by Adam Smith.

and subjected to such tolls only as should appear to be necessary for keeping the works in repair. This has ever been the principle of the Chinese, to which the greatness of their empire may be attributed. The same principle governed Lewis XIVth in making the canal of Languedoc, and wherever a deviation from this principle has taken place, the public has been deprived of a considerable proportion of the advantages of inland navigation.

It has long been a question of political oeconomy, whether it be better for a nation, in time of peace, to lay up the redundance of her revenue in bank in order to provide for the future exigencies of war, or whether it be better policy to borrow money when war becomes indispensable, in order to prosecute it with vigour, and to charge posterity with the debt, and to apply the future redundance of revenue in peace, to reduce it by degrees.—Let nations like *Holland* and *England*, who are nearly arrived at the highest pitch of internal improvement, and are at the same time burthened with heavy taxes, dispute this point. But let *Ireland* whose situation is diametrically opposite to that of both those countries, whose debts and taxes are inconsiderable, and whose internal improvement is more than proportionably small,—let her extend the system that she has in part adopted, and the benefits of which are already manifest in the encrease of her agriculture, and the extension of her linen and cotton manufactures.—Let Ireland, I say, apply a larger portion of her revenue and

every possible saving in her civil establishment, in well directed bounties on internal improvement, which will repay her more than tenfold whenever she may have occasion to call upon her people for a supply in the exigency of her own affairs, or in order to support the interests and honour of the empire at large.—A respectable and ingenious writer * is of opinion that it would have been wiser in Great Britain to have adopted this plan than to have paid off any part of her debt by the sinking fund.

“ But the question to which the reader’s attention is more particularly called at present, is, “ if the sum that has been taken from the sinking fund, and applied to the discharge of our “ funded incumbrances, had been expended “ solely in making Great Britain one populous and “ cultivated field or garden ; whether the nation “ could not have borne the whole debt with less “ difficulty than it now can support the debt as it “ has been reduced ? Twenty-four millions laid “ out in promoting the improvement and cultivation of the soil, would have rendered every “ acre in the kingdom productive of some valuable article.—The whole country would have “ exhibited one uninterrupted scene of labour and “ fertility. No more well founded complaints “ would be heard, that the number of the people had decreased, that the poor wanted en-

* History of the Public Revenue of the British Empire, by Sir John Sinclair, page 364.

“ courage to industry, or the means of employment.

“ In Ireland, the surplus of the revenue is in general applied to such public purposes, and the effects of such a system in that country, will establish it in Great Britain some years hence; if the example of France does not render the establishment of an unalienable sinking fund absolutely necessary.”

Too much praise cannot be given to the politic and honourable disposition, manifested by the present Administration for œconomy and retrenchment. It may therefore be expected, that the Chancellor of the Exchequer will stand forth to oppose every expenditure under the much abused pretence of public benefit: “ What” (will he cry) “ can be alleged in favour of your scheme that has not been oftentimes repeated and even proved, (by parliamentary logic at least) in support of a thousand odious and detestable jobs with which the nation is now encumbered—away, away—the faith of parliament is exhausted;—the credit and resources of the country are barely sufficient in the present emergency to supply the exigencies of the state.”—To this I reply, that there is no occasion to levy any new tax, or to raise any new fund in order to *effect* the greatest *permanent improvement* which this country is capable of receiving. But before we open the committee of ways and means, let us first enquire into the state of inland navigation in Ireland, and see—what has been accomplished—what is still in progress—and then let

us take a view of the nature, extent, and practicability of such objects as we would propose to embrace. Let us compare the probable benefits resulting to the kingdom from the proposed improvements, with the amount of the expence to be incurred in accomplishing them; and lastly, let us consider whether a fund at present appropriated to an object of great national concern, might not with more advantage to that object and to the community at large, be directed into a different channel.

The Lagan navigation extending from the sea at Belfast into Lough Neagh is at length accomplished, and boats of considerable burthen now ply upon it. There is also a navigable communication between the said lough and the sea at Newry, by means of the Newry Canal. This work, however, is in an imperfect state, and requires very considerable repairs.

The indefatigable and well directed perseverance with which the Grand Canal Company have conducted their works for these last ten years, has at length crowned their endeavours with success. A still-water navigation of forty-three miles from their harbour in James's-street into the river Barrow at Athy, is now compleated in a masterly manner, and this great work which in its unfinished state, so long continued to be the reproach, may now justly be deemed one of the chief ornaments of Ireland; on the enlarging the scale and perfecting of this canal, the company laid out within the last twelve months no less than the sum

sum of 74,000/. The advantages already derived to the country through which this canal passes, are sensibly felt by the proprietors of estates in its neighbourhood, the value of land having risen in many places adjacent to the navigation, to more than double the former rents, while the means of subsistence is rendered more easy by constant employment being found for every labourer, and a ready market for every commodity. The reduction in the price of fuel in the vicinity of the canal is an object of the greatest importance to all ranks of people, but more especially to the poor, who in this damp and inclement climate, are subject to more diseases from the want of fuel, than their rich and warm neighbours are willing to believe; and in truth it does not proceed from any malicious disposition in the lower order of people, that the face of the country is naked, and that the hatchet and the saw, dismantle and disfigure every tree and hedge that is planted. When the north wind blows and the snow descends through the roof of his cheerless hut,—what law shall teach the shivering peasant to respect his lord's improvements! The reduction in the price of culm alone has reduced the expence of burning lime very considerably, and the farmers in the vicinity of the Grand Canal will soon begin to feel the benefits resulting from a more general use of this manure. And here it may be proper to remark that the innumerable navigable communications which have been made to collieries, (*or the black Indies*

as they are not unaptly termed) in different parts of Great Britain, have considerably reduced the price of every species of machinery, and every production of art in which fire is a constituent part, and have enabled the manufacturers of England to undersell those of every other country in the world, notwithstanding the heavy taxes which they are obliged to pay.

The company is at this moment engaged in the completion of one of the most arduous and magnificent undertakings ever attempted in Great Britain or Ireland, I mean the forming of floating and graving docks, of greater magnitude and extent than all the docks in Liverpool together, on which great work they have expended upwards of 71,000*l.* and the estimate for completing the same in the course of the ensuing summer amounts to 23,900*l.* more. And these docks, however grand, bear no more than a just proportion to the magnitude and extent of the inland navigations which are to terminate in them. A considerable progress has already been made by the said company in their canal to join the Shannon at Banagher; the scale of this canal is for boats of between fifty and sixty tons burthen, it branches off from the line to the Barrow at about twenty-one miles distance from Dublin, and it is expected the company will open it as far as the town of Tullamore in the King's County, (about forty-four miles from Dublin) in the course of this present year; they will then have about twenty miles more to perfect between
Tullamore

Tullamore and the Shannon, which may with ease be accomplished in three years, the chief difficulty (the rising to the grand summit level of the country) being already overcome.

Considerable sums of money had been laid out by the commissioners of inland navigation on the river Barrow previous to the year 1789, when several subscribers were incorporated by charter from his Majesty, under the authority of an act of Parliament, by the title of "The Company of Undertakers of the River Barrow," and a bounty of one third of their expenditure on said river, was granted by Parliament. This company has proceeded in their work with great judgment and public spirit, and it may reasonably be expected, that in the course of two years they will perfect the object of their incorporation, by making a complete navigation for boats on the same scale with that of the Grand Canal, from the tide water at St. Mullins to the town of Athy, where their navigation unites with the Grand Canal.

In the year 1789, the company of undertakers of the Royal Canal, was incorporated under the authority of an act of Parliament for the purpose of making a canal from Dublin to the river Shannon, at Tarmonbury in the county of Longford. This work was estimated at 198,000*l.* and one third part of said estimate was granted by Parliament to the company, as an encouragement to the undertaking. It has been conducted with great spirit and diligence since its commencement: the locks, bridges, &c. &c. as far as they are executed, are well built, and with excellent materials.

About 40,000*l.* was formerly expended in ill directed attempts to remove the difficulties that impeded the navigation of the lower part of the river Shannon; after which, a company consisting of the principal gentlemen of the county of Limerick was incorporated, who undertook to open the navigation of the river from Killaloe to the sea; and by an act passed in the year 1789, this company received a grant of one third of their expenditure on this work, together with liberty of taking a toll of three-pence per ton per mile, on said navigation, between Killaloe and the city of Limerick. Some unforeseen difficulties have retarded the progress of this work, and the proprietors have made application to Parliament for further assistance, which it is hoped they may receive on condition of consenting to some reduction of their toll.

At Ballyshannon, works are carrying on under the direction of a company who obtained an act of Parliament in 1789, for the purpose of opening a navigable communication between Lough Earn and the Bay of Donegal. The proprietors of this work are by said act likewise entitled to receive the third part of their expenditure. Of the further extension of this line I shall have occasion to speak hereafter.

The company of the undertakers of the Boyne Navigation were incorporated also in 1789 under similar circumstances, with permission to take a toll of 3*d.* per ton per mile. They have proceeded with spirit—and have nearly finished their work as far as the town of Navan.

Having

Having made a short review of all our inland navigations already finished or in progress towards completion : I hasten with pleasure to the contemplation of the grand features which this country presents for its further improvement.

The most cursory observer, casting his eye on the map of Ireland, must be struck with the number and extent of rivers and lakes with which this island is so happily enriched ; the beauty and grandeur of the river Shannon, must however, necessarily arrest his attention ; but when he considers the situation in which this river is placed, extending its deep and gentle stream through the heart of the kingdom, from north to south for upwards of one hundred and eighty miles ; that it rises in an extensive lake, which is surrounded for twenty miles, by hills filled with coal of the best quality, with iron ore, equal, if not superior, to that which Great Britain annually imports at a heavy expence from Sweden and Russia, and that the adjacent country every where abounds with flint, pipe-clay, and every material necessary for the manufacture of earthen and stone wares,—he will be astonished at the sports of nature, that has been so lavish of her gifts to a nation so regardless of their uses!

A few words will be sufficient to give the reader an idea of the importance of the collieries and iron mines at Lough Allen.

In Mr. Jessop's report to the company of undertakers of the Grand Canal, on the subject of the river Shannon, dated 19th September, 1794, he

says, " That as coal is found on both sides Lough Allen, and at points widely extended from each other, the strata inclining with a gentle dip, it may be reasonably presumed, that there are *many thousand acres of coal surrounding the Lough.*—It is of a good quality and easy to be worked, and, as much of it can be drained without steam engines, it can be got at a small expence.—It is found excellent for smelting IRON STONE, *of which there are immense quantities of the best quality.*"

These coals now sell at the pits at 8s. 8d. per ton of 30 hundred weight; were the market open the price would fall, as the collieries would then be wrought on a larger scale—but at the present price, they might be carried from Lough Allen to Dublin, and sold there at 14s. per ton, *if the navigation were free from tolls.*—The quantity of coals imported from Great Britain in the year 1794 was 392,952 tons; the average price of British coal is not less than 19s. per ton of 24 hundred weight, but a continuance of unfavourable winds has frequently, in the depth of winter, encreased the price of coals to 30s. and 40s. per ton, and at one period, they were sold at 3l. per ton. When brought by inland navigation the price can never vary, as the carriage does not depend on wind, tide, or war.—The colliers who bring this coal, generally return *in ballast*, so that little or no return is made to Ireland for the immense sum of 372,400l. annually sent out of this country for coal.

In

In Lord Sheffield's " Observations on the Commerce of the American States," he says, that from 15 to 20,000 tons of Swedish iron were annually imported into Britain, the quality thereof being superior, on account of its toughness, to the English iron. This iron in bars was valued at from 10*l.* to 10*l.* 10*s.* per ton—and when manufactured produced a profit of from 11*l.* to 45*l.* per ton—the average being about 28*l.* per ton—and this produced a balance in favour of Great Britain amounting to upwards of 484,500*l.* The iron of Lough Allen has been frequently assayed by persons of skill in this branch, who have all pronounced it to be equal to the best Swedish iron.—Here then is a new source of mutual wealth and advantage to Great Britain and Ireland.—An iron foundry has lately been established on the banks of Lough Allen by Messrs. Reyley's, under the protection of Peter Latouche, Esq. who has advanced a very considerable sum of money upon the most liberal terms, in order to carry on this manufacture.—The works are nearly compleat, and nothing is wanting to make this foundry equal in magnitude and importance with that at Carron in Scotland, or Colebrookdale in England, except opening the navigation of the river Shannon, which would be a means of distributing its produce throughout Ireland, and of producing a very considerable foreign demand.

I have already mentioned that some partial efforts were formerly made to render this river navigable, yet as those attempts were not conducted with skill,

nor

nor supported either by public spirit or private interest, it is not surprising that the few works now remaining, which were then erected, should be of no other use than to furnish materials for constituting new works upon one general and improved plan.—An accurate survey of this river was in the course of the last summer made by engineers of unquestionable merit, under the direction of the Grand Canal Company, and an estimate of the expence of completing the same, from Lough Allen to Killaloe, was made by Mr. Jessop, amounting to 73,000*l*. A proposal on the part of the said Company has been laid before Parliament this session, wherein they bind themselves to complete this great national object, on receiving from time to time such sums as they shall expend thereon, not exceeding altogether the estimate above mentioned; and should the expenditure exceed the estimate, they guarantee the public against the loss, by paying it themselves, on condition of receiving one halfpenny per ton per mile on the river, such toll not to exceed one shilling per ton for any distance, and no toll on the lakes. They further offer to reduce the said toll *one half, or sixpence per ton for any distance*, provided the expenditure shall not exceed 73,000*l*. or on their receiving from the public whatever sum they may expend over and above the said estimate. It is evident that the Company must derive great advantage from the river Shannon being made navigable and free from toll, as it must necessarily produce a very considerable trade on their canal, between Banagher and Dublin—and this circumstance will be a sufficient inducement

ment to them to keep the navigation of the river at all times in perfect repair, without which neither they nor the public could derive any advantage from it. This completely answers the principle already laid down, the propriety of which is supported by the authority of a man * justly esteemed the first œconomical writer in the world. I shall only further remark, that the wisdom of this liberal policy will act more powerfully as an incentive to open, improve, and extend the various other rivers, which fall into or intersect the great ones, than any bounty which could be granted by Parliament; the advantages arising from the free navigation of the Shannon, together with the communication (which a period of three years will effect) between the capital and that river, by means of the Grand Canal, must produce a spirit of improvement in the province of Connaught, hitherto unknown and unexpected in that part of Ireland.

The river Suck may easily be made navigable as far as Ballinasloe, and a line of communication may be formed at a moderate expence between that river and the lower part of Lough Corib, which falls into the Bay of Galway, and then a complete Inland Navigation will be open from the Harbour of Dublin to the Bay of Galway, intersecting the middle of this island at right angles with the river Shannon, which nearly divides it from north to south.—From the northern part of the river Shannon, a line has been surveyed by the valley of the river Leitrim through Lough Scur and Woodford Lakes into Lough Earn, and from thence to

* Adam Smith.

the Bay of Donegal, by Ballyshannon and Belleek, as appears by Mr. Richard Evans's report to the Navigation Board, and also by a report of Mr. Wm. Chapman to the Lough Earn Company.—Another line of communication between the Shannon and the Western Ocean has been suggested by the river Boyle, Lough Key, and the Lough and river Arrow into the Bay of Sligo.—A navigable communication may also be found practicable between Lough Earn and Lough Neagh by the Blackwater river, and from Lough Neagh by the upper Bann to the sea at Colerain, (the northern extremity of this island).—I have already mentioned that the communication is now open between Lough Neagh and Belfast by the Lagan navigation, and to the Bay of Carlingford by the Newry canal.

The rivers Derg, Fin, and Foyle, (the two first rising in lakes of the same name) all communicating with each other, fall into the sea at Lough Foyle, and intersect the county of Donegal, and water the towns of Lifford, Strabane, and the city of Londonderry, in the most admirable manner. In short, what might be deemed no more than a trifling national expenditure, (if judiciously applied) would be sufficient to produce a complete navigable communication between every part of Ulster, and unite that province with the river Shannon, through Lough Earn and Woodford lakes, as already mentioned.

The river Nore, one branch of which runs near the collieries of Castlecomer, is capable of being made navigable to the town of Kilkenny, and from thence to the tide water at Ross. And a survey has also been made of a line between the Nore, a little below Kilkenny, to the river Barrow near Loughlin-
bridge ;

bridge; and this fine river, (the Barrow) being, as already mentioned, vested in the hands of a company who are carrying on their works with diligence, will in the course of two years, be navigable from its junction with the Grand Canal below Athy, to the sea at Waterford.

The river Suir, which rises in the Banduff mountains in the county of Tipperary, is capable of being made navigable to the town of Thurles, in the said county; from whence it runs to Holycross, and then to Ardfinane; then turning to the east, it divides the counties of Tipperary and Waterford. It then passes the towns of Clonmel and Carrick, from which last place it is at present navigable.

I consider this river under the same predicament with the Nore—Both these rivers should, upon my plan, be made navigable at public expence, and free from all tolls except some very small charge which might be barely sufficient to keep them in repair; and there can be little doubt that the company of undertakers of the river Barrow, would contract to perform these useful works, at a fair estimate, without any other consideration for their trouble and risk, than the advantage arising to them from the great encrease of trade on their navigation, consequent of such extension.

The river Slainy rises in the south-east extremity of the county of Wicklow, and proceeding in a winding course, sometimes turning south-east, sometimes to the south-west, passes into the county of Carlow, and then in a south-west direction, divides the county of Wexford, till with

stream it reaches the town of Enniscorthy, from whence rolling smoothly in a south course, at length it makes an elbow, and running directly east falls into a bay of the sea, a little below the town of Wexford, which stands on the south bank of this river. Some considerable streams which empty themselves into the Slainy, and others which fall into the eastern side of the river Barrow with no sudden descent, approach so near to each other in the county of Carlow, that there is very great reason to believe, a navigable communication might, without much difficulty be effected between the two rivers, and also a navigable communication between the Slainy and the river Avon, which latter after passing the Copper-mines, at Cronebean and Ballymurtagh, empties itself into the sea at Arklow. And as the Barrow is on the point of becoming completely navigable, it is highly probable, that if the junction between the two rivers were once formed, the evident advantages resulting from inland navigation would soon overcome the difficulties which might present themselves in making the river Slainy navigable from the points of junction, to the sea at Wexford and Arklow.—On some of these subjects, however, I speak with diffidence, as sufficient surveys have not yet been made, whereon to found an opinion of their eligibility.

The river Black-Water in the county of Cork is now navigable no higher than Lismore; but we are informed by Lord Orrery's letters, that it was formerly navigable as far as the town of Mallow, which is forty miles from
its

its mouth. There are several salmon-wears, and other impediments on the river, but none that might not be removed without difficulty, and the river restored to its former utility with a very moderate portion of trouble and expence; which, whenever the benefits resulting from Inland Navigation are more universally felt, must of course be effected.

The river Lee, which empties itself into the sea fifteen miles below Cork, is navigable no farther than that city, but by the abatement of wears and a very moderate expence, it might be made navigable for fifteen or twenty miles farther up the country.

I have already mentioned, that the navigation of the river Boyne, is at present nearly compleated as far as the town of Navan; from whence it might, without much difficulty, be extended to Trim, and from thence by Clonard, to join the Grand Canal near Edenderry; a work which would be of infinite service to the agriculture and improvement of that part of the country, as it would be a means of supplying it with turf at a moderate rate, and would at the same time furnish it with coal and culm by a direct communication through the Grand Canal, with the collieries of Dunan and Castle-comer. The other branch of the Boyne, from Navan to Kells, and from thence by the Blackwater river to Lough Romer, in the county of Cavan, is also practicable. This county and the county of Westmeath, are both so interspersed with lakes communicating with each other, some of which empty

themselves into the river Brusna, and others into the river Inny, both of which fall with copious streams into the Shannon, that it is not at all improbable, that a second interfection of the province of Leinster may, at some future period, be made through this line, to *the grand artery of the kingdom,*
The RIVER SHANNON.

In so cursory a review of the principal rivers of Ireland, as I have here taken, it is next to impossible that I should not have overlooked many that are capable of being made navigable at a moderate expence; but as this publication is only intended to call the attention of the men of landed property in Ireland, to *the most essential of all internal improvements*, it is to be hoped, that in the course of the ensuing year, every river of magnitude or extent in this kingdom, will be surveyed, and its levels taken, by which means the public may be able to judge, to what extent Inland Navigation may be carried, and at what expence.

The reader may be enabled to form some idea of the great advantages resulting to the nation from opening the navigation of the principal rivers of Ireland, by the following calculation of *the number of square miles and acres that will be improved by the completion of the GRAND CANAL to the RIVER SHANNON; the RIVER SHANNON from LIMERICK to LOUGH ALLEN; the RIVER BOYNE from EDENDERRY to DROGHEDA; the RIVER BARROW from ATHY to ROSS; the RIVER SUIR up to CLONMELL; and the RIVER NORE as far as KILKENNY.*

Square miles.

From Dublin to Hazle-Hatch 7 miles, 1		
mile on each side will be improved —	14	
From Hazle-Hatch to Sallins 7 miles, 3		
miles on each side ditto —	42	
From Sallins to Robertstown 5 miles, 5		
miles on each side ditto —	50	
From Robertstown to Philipstown 20		
miles, 8 miles on each side ditto	320	
From Philipstown towards the Shannon,		
20 miles, 10 miles on each side ditto	400	
In the neighbourhood of Roscrea, &c.		
18 miles, 10 miles on each side ditto	360	
From Robertstown to Athy 23 miles, 8		
on each side, and 14 miles by 8 on		
the other ditto — —	296	
The River Shannon 180 miles, 15 on		
each side ditto — —	5,400	
The River Boyne 50 miles, 5 on each		
side ditto — —	500	
The River Barrow 55 miles, 10 on each		
side ditto — —	1,100	
The River Nore 15 miles, 5 on each		
side ditto — —	150	
The River Suir 30 miles, 8 on each		
side ditto — —	480	

Total square miles will be improved 9,112

Say 9000 square miles, which contain 5,760,000
 Irish acres (or upwards of 9,330,000 English acres.)
 It might be clearly proved, that the whole of this
 land

land would be encreased in value, by the above navigable extension, from 7s. to 10s. per acre ; but say only 4s. per Irish acre, and the amount of the encreased national wealth will be 1,152,000*l.* per annum ; which, at twenty years purchase, would be an increase of national wealth, amounting to upwards of TWENTY-THREE MILLIONS OF POUNDS STERLING !

After the bright example which China, Holland, and England furnish, it will hardly be denied, that every country is more or less capable of improvement, according to the number, the nature, and the disposition of her navigable rivers.—If this be true, we may look forward with a well founded hope of seeing Ireland, at no distant period, vie with the richest and best cultivated parts of South Britain ; for certain it is, that taking into consideration the form and comparative extent of our island, no part of that fortunate country is superior to Ireland in general, in the number, extent and distribution of rivers, capable, at a small national expence, of being rendered permanently navigable.

Let us for a moment dwell on the pleasing picture ; let us behold an united, industrious, and contented people, extending the healthful arts of agriculture, reclaiming bogs, fencing, planting and manuring every spot.—No dreary wastes, no deserted villages to be seen ; no squalid and half-naked peasantry, no famished children robbing for bread ! But competence smiling on industry ; women, with their infant train, plying the busy loom ; decency, order and morals every where, establishing their empire over their former *inveterate foe, cruel and imperious necessity !*

sity!—Whoever reflects for a moment, on the certain effects produced by an extensive Inland Navigation in a fertile country, terminated by good ports and harbours, will not think this picture overcharged; since, “*as trade encreases, it continually draws supplies of commodities and manufactures from the adjacent country, and in the space of a few years, equally changes the spirit of the people and the appearance of the places which they inhabit, plenty and neatness, being the immediate descendants of industry, wealth and magnificence, in process of time, springing from the same stock, and these very frequently in places that have been for a long time disregarded, decayed and neglected,—Truths, which however plain and obvious of themselves, can never be too seriously and too frequently considered.† Hence it is, that in a country blessed with the advantages herein alluded to, the inhabitants can with so much ease, bring so great a part of it into cultivation, which furnishing in plenty the materials for trade and commerce, lead men there, to what they are driven in another country. Hence art attracts art, one manufacture begets another, and diligence spreads on every side; for industry, as well as idleness, may be communi-

* All the great manufactures in Lancashire are to be chiefly ascribed to the extensive Inland Navigation in that county, and to the improvement of the port and harbour of Liverpool by the magnificent docks erected there.

Campbell's Political Survey of Britain, Vol. I—167.

† Political Survey of Great Britain, vol. I. page 159.

cated.

“ cated. *It is owing to this spirit, and to the prosperity*
 “ *that naturally attends it, that in some places, Inland*
 “ *Navigation and foreign commerce in South Britain,*
 “ *have been pushed so far, that there is more business*
 “ *done and more seamen employed IN A SINGLE PORT,*
 “ *THAN IN A WHOLE COUNTRY AND BY A WHOLE*
 “ *NATION, who have some trade and commerce too.”*

That *single port*, is LIVERPOOL, and that *whole country* alluded to, is IRELAND! How long, alas! shall this reproach be applicable to a country, so happily endowed with every requisite for internal improvement!

To be able to convey troops and artillery, with celerity, from one part of a kingdom to another; or in case of any unforeseen emergency, to concentrate the military force in any particular place, are objects of the greatest importance to the internal defence and strength of a Nation. Inland Navigation alone, is the mean by which such advantages are attainable.—When the river Shannon shall be made navigable, and the junction perfected between it and the Grand Canal, ten thousand troops with their baggage, artillery, ammunition and stores, might be carried within three days from Dublin to Limerick, which journey could not be performed over land by such an army, in less than ten days or a fortnight, according to the ordinary rate at which such large bodies move.—And if conveyed by water, they would arrive fresh and fit for action the moment after their debarkation, instead of being harrassed and disabled by a long and fatiguing march.—Or should it be the object of government

to concentrate its forces in the heart of the kingdom; in two days the garrison of Dublin might be conveyed in boats to Athlone, and met there by the troops dispersed in the counties of Limerick, Clare, Mayo, Galway, Sligo, Tipperary, Waterford, Kilkenny, King's and Queen's Counties, Carlow, Kildare, Longford, Leitrim and Roscommon.—These are considerations, which make the advantages of an extensive Inland Navigation appear in a new and important light.

I have been informed from respectable authority*, that the average amount of Grand Jury presentments in Ireland exceeds £.300,000 per ann.—if we allow one-third part of this sum for bridges, gaols, court-houses, &c. &c. there will remain no less than £.200,000 per ann. for making new and repairing old roads;—to which may be added £.50,000 more annually expended on turnpike roads, which sum, is repaid to the Commissioners, or Proprietors, by a heavy tax on the public.—But suppose the whole expense of roads were taken at £.200,000 per annum,—it might be well worthy the consideration of Parliament, what proportion of so large an annual tax on the agriculture and commerce of the country, might be saved by the various and extensive navigable communications herein pointed out.

And here let me add another consideration, of still greater moment.—One boat, drawn by a single horse, and attended by three men, will with ease transport sixty tons burthen on a still-water navigation, at the ordinary rate of travelling used by cars and waggons, which is about twelve miles per day.

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* It has been declared from the bench.

To convey the same quantity of goods by land, the same distance, would require one hundred and twenty horses and forty men.—We shall be greatly within compass, if we compute the annual tonnage, including manure, brick, stone, sand, and other gross materials, which would be transported on the navigable extensions, herein recommended, at two millions of tons per annum, carried on an average sixty miles distance.

One boat would transport 60 tons, a distance of 60 miles in 5 days;—she would therefore convey 4380 tons, 60 miles in one year.—But as she may not always be fully laden, and must sometimes return empty, it will be fair to take the average quantity transported by one boat the above distance, at 3000 tons per annum.—At this rate, 666 boats would transport two millions of tons, a distance of 60 miles in one year; the expence whereof would be—

666 horses at 20 <i>l.</i> per ann. for each horse, including maintenance and deterioration	—	—	£.13,320
1998 men at 20 <i>l.</i> per ann. for each man			39,960
666 boats at 30 <i>l.</i> per ann. for each boat, including repairs and deterioration	—	—	19,980

Total annual expence by <i>water carriage</i> in transporting 2,000,000 tons of goods 60 miles <i>distance</i>	—	£.73,260
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120 horses, 120 cars, and 40 men, would convey 60 tons, a distance of 60 miles in five days, or

4380

4380 tons the same distance in one year.—A similar deduction to that made above, for want of full lading in boats, must also be made for cars, particularly as it requires an able horse to draw half a ton weight on land. The above horses, cars and men, will therefore transport 3000 tons a distance of 60 miles in one year.—The number and expence of cars, horses and men, necessary to transport two millions of tons a distance of 60 miles in one year is as follows :—

79,920 horses at 20 <i>l.</i> per ann. for		
each horse	—	—
		£.1,598,400
79,920 cars at 1 <i>l.</i> per ann. for use		
and wear of each car	—	
		79,920
26,640 men at 20 <i>l.</i> per ann. for		
each man	—	—
		532,800

Total annual expence <i>by land carriage</i>		
in transporting 2,000,000 tons of		
goods 60 miles distance,	—	2,211,120

Annual national saving in the carriage by water of the above tonnage	79,254 horses, 24,642 men, and 2,137,680 pounds <i>sterling.</i>
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If I am asked, whether it be my intention to recommend the *immediate* granting of bounties, sufficient to induce individuals, or bodies corporate, to undertake the opening and improving of the several rivers herein enumerated, I reply it is not.—First,

because no surveys, sufficiently accurate, have yet been made of any of those rivers, except the Barrow, and the Shannon; next, because this is not the moment when it might be eligible to raise so large a sum of money as would be requisite to carry on such various and extensive works; and lastly, because I am of opinion, that undertakings of this nature should be well considered, and accurately surveyed and estimated, before they are undertaken.—If Parliament shall, in the present session, think fit to accede to the proposal of the Company of Undertakers of the Grand Canal, for making the river Shannon navigable, the whole of next summer will be spent in taking further levels and surveys of particular parts, in laying out the different works, and forming contracts for their execution; so that little or no money can be demanded from the Treasury, on account of this river, before the year 1796, and then, the whole amount that can be judiciously expended in that year, will not probably exceed 15,000*l*. The systematic commencement of this great work, must, however, necessarily stir the public attention, and if Government shall, in the mean time, direct proper surveys to be made of the several rivers already mentioned, and estimates to be formed (by engineers capable of such a work) of the expence of making them navigable. This, I conceive, to be all that is prudent to be done at present, and when Peace shall come to restore public confidence, with it will revive the spirit of internal improvement and judicious enterprize.

I come

I come now to speak of the fund, from whence these various and extensive undertakings may be supplied with the means of execution, without levying any new tax for that purpose.

Without entering into a painful recital of the crippled state of our legislature, before the glorious event of its emancipation in the year 1782, it is sufficient to observe that no bill enacted in this country, previous to that period, which in the slightest degree affected the interests of British manufacturers, farmers, or traders, had any chance of passing into a law.—Such bills being usually *cushioned* in the office of his Majesty's Attorney General in England, and the Irish Parliament being always too polite, to ask any impertinent questions concerning their fate.—We can now speak of such proceedings with the more patience and temper, because we may bless the happy æra of liberality and good-sense, which seems, in the present day, to bespeak a conduct the reverse of such impolitic and fordid monopoly!—But such having then been the state of affairs in Ireland, the market of our capital was left open and unprotected, to the farmers on the western coast of England, who supplied Dublin with corn at a less expense of carriage by sea, than the Irish farmers beyond ten miles round that city could supply it by land.—This necessarily acted as a powerful discouragement to our agriculture, but the difficulty was, how to put the Irish farmer on a footing in his own market with the English farmer, without raising
the

the jealousy of the latter.—At length, in the year 1759, the late Speaker of the House of Commons*, brought forward a bill, granting bounties on the inland and coast carriage of corn to Dublin; and as those bounties were calculated to pay the whole expence of such carriage, the Irish farmer thereby obtained an advantage over every foreign competitor. Fortunately for us, the object and intention of this bill was not discovered by the sagacity of an English Attorney General, until after it had passed into a law, and to this political manœuvre we may, in the first instance, attribute the improvement and extension of Irish agriculture.—After what I have said in praise of this measure, it cannot be supposed that I mean to detract from the merit of a scheme, to which the present advanced state of the corn trade of Ireland is so much indebted;—but, though the effects of these bounties have been highly beneficial, it is nevertheless possible that a more salutary mode of improvement might have been adopted, whose advantages would have been more permanent.—Had those bounties, from the year 1759 to the present period†, been applied in a judicious and systematic encouragement

* Lord Viscount Pery.

† The bounties paid on the inland and coast carriage of corn to Dublin from the 25th March, 1759, to 25th March, 1794, amount to the sum of 1,633,822l. 15s. 9d. f.—These

encouragement of Inland Navigation, what an immense encrease in agriculture, manufactures, and commerce, might have been attained by Ireland at this day !

But even supposing the inland and coast carriage bounties on corn to Dublin, to have been the best mode of encouragement to the Irish farmer that could have been adopted in 1759, it does not, therefore, necessarily follow, that the same system will be equally beneficial in 1795. What may be deemed a proper encouragement to industry, at an early stage of society, may not be found so well adapted to its situation at a more advanced period *. — But the inland and coast bounties on the carriage of corn to Dublin, were necessarily accompanied by one disadvantage, which, without doubt, injured the agriculture of Ireland in a very material degree—while bounties were granted for bringing corn to the capital, it would have been absurd to have given a premium for taking it away from thence, consequently the port of Dublin was

bounties are annually encreasing ; in the last three years they amounted to 268,502l. 5s. 10d. the average of which is 89,500l. per annum.—The amount of which in four years would be more than sufficient to make all the improvements herein projected at the public expence.

* An alteration in the proportion of the bounties on corn and flour, afterwards took place, and the bounty on unmanufactured corn was reduced to one half, in order to encourage the building of flour-mills and malt-houses.

precluded from, and still remains deprived of, the advantage of an export bounty, while every other port in Ireland enjoys that benefit.

If we look into the accounts of the exports and imports of corn and flour for the last ten years, we shall find that Ireland, within that period, has imported scarcely any corn from Britain, but on the contrary, has annually supplied that country with a very considerable quantity of grain. And it may be proper here to remark, that the original motive for granting bounties on the carriage of corn to the market of Dublin, no longer now exists, as the wise and well digested corn law, brought in by the present Speaker * of the House of Commons, when Chancellor of the Exchequer, in the year 1783, must for ever prove a complete protection to the Irish farmer, who cannot now be deprived of his own market, while he has corn to supply it at a moderate rate.

The enlightened husbandman therefore, will not, I am persuaded, think me his enemy, if by appropriating to the extension of inland navigation a considerable portion of the funds hitherto applied to the payment of the bounties on the inland and coast carriage, I enable him to bring his grain to a much more extensive market, at a less expense,

* To the profound and extensive knowledge in commercial affairs possessed by this gentleman, and to his unabated attention to the interests of Ireland, our agriculture, manufactures and trade, are indebted on many occasions; but more particularly to the judicious regulations suggested by him, is at present owing the flourishing state of the linen manufacture in this country.

without the bounty, than he can at present with the assistance of it, while at the same time, I furnish him with the ready means of improving his lands at a trifling expense, (by back carriage of manure, &c.) and thereby, of raising the value of his farm in a very considerable degree.

In order to make my position evident, I ask—What is the average price of land carriage in Ireland?

Eight-pence per ton per mile.

What was the intention of the Legislature in granting bounties on the carriage of corn to Dublin?

To pay a portion of the expense of transportation.

What proportion of that expense do the present inland bounties pay?

The inland bounty on flour and malt, is 8*d.* per ton per mile—it consequently pays the whole of the expense on those articles—On oat-meal, it is 7*d.* per ton per mile, equal to 7-8ths of the expense.—On wheat, bere, barley, oats and rye, the bounty amounts to no more than 4*d.* per ton per mile, and therefore pays only one half of the expense of land carriage.

The price of freight on still-water navigations carrying boats of 50 and 60 tons burthen, is much over-rated at one halfpenny per ton per mile, allowing an ample profit to the carrier; and as a considerable proportion of the delay and expense of water carriage, consists in loading and unloading, the charge of freight upon a canal of sixty miles in length, would consequently be considerably less.—Suppose further, that in consequence of adequate

compensation to be granted by Parliament to the proprietors of Canals already completed, and bounties to the undertakers of navigations hereafter to be made, that no more than one halfpenny per ton per mile toll, should be taken on all corn, and flour passing on such navigation.

It would appear then, that were this kingdom intersected by inland navigation, upon the general idea which I have thrown out, the farmer might bring his grain to Dublin from the most distant part of Ireland at the rate of one penny per ton per mile, without the assistance of any premium whatever, that is, at one fourth part of the expense he now incurs by land carriage, over and above the inland bounty which he receives.

It is true, indeed, that the miller and maltster would still lose one penny per ton per mile, by the exchange of water carriage for the present inland bounties, which, as I before observed, pay the whole of the expence of transportation on flour and malt.—They should, however, take into consideration, the loss and damage they now sustain by long journies on cars, through dirt and rain; and, on the contrary, the advantage they would derive by bringing the flour merchant, the distiller, and the brewer, to the doors of their mills and malt-houses, as will be more fully explained in the progress of this argument.—And though many farmers, millers, and maltsters, must necessarily incur some expense of land carriage, in transporting their flour and grain to the banks of the nearest navigable waters,

yet

yet this transportation will generally be within the compass of a few hours, or at most of half a day's journey*. And as their several commodities will be sold to corn and flour merchants at their mills, or on their farms, or perhaps by sample at the next market town, a common carman may be sufficient to deliver the goods, and then the husbandman will no longer be obliged to quit the superintendence of his farm, nor be exposed to the idleness, dissipation and expense to which he is now subject, by making frequent visits to the capital, in order to procure the inland bounty.—And indeed the trouble and delays necessary to be undergone, in order to obtain it, are so great, that not more than one third of the corn sold in Dublin receives any bounty at all. †

* Were the plan herein recommended, of opening the principal rivers of Ireland at public expence, carried into effect, there can be no doubt, that in a few years, so many collateral branches would be formed from those rivers, and from the main trunks of principal canals connected with them, and carried by degrees from one market town to another, where easy levels might be obtained, that scarce any spot throughout the whole island would remain more than half a day's journey from the sea, or from some navigable river or canal.—It may further be observed, that most of the flour mills in Ireland are built on the banks of rivers easily made navigable; and malt-houses would soon be removed to those situations most eligible for water carriage, and a cheap supply of fuel.

† See the account of corn weighed in Thomas-street in the years 1785, 1786, 1787—compared with the amount of the inland bounties paid on the carriage of corn to Dublin in those years.

But there is one consideration, of infinitely greater importance, than any which I have mentioned, namely, the obtaining *the export bounty from the port of Dublin, which must necessarily follow the abandonment of the inland and coast-carriage bounties*, a circumstance which would more than compensate to the landholder, the miller, and every person concerned in the tillage or manufacture of grain, for the total abolition of all other bounties, even though this *operative* premium were to come unaccompanied with the extension of Inland Navigation, or with any other advantage whatsoever.

This assertion may be easily evinced by the statement of a material fact.—The encrease in the number of bolting mills of late years in Ireland, is so great, that the consumption of the Dublin market is not nearly sufficient to keep them constantly at work, and the proprietors of the mills are even afraid to send any considerable quantity of flour at once to the capital, lest the baker should take advantage of a large supply to reduce the price.—How great a discouragement this must be to the agriculture of the country, it is unnecessary to state;—and how much the active and enterprising spirit of commerce is thereby shackled, is also sufficiently evident.—Were the export bounty granted from the port of Dublin, neither the miller nor the maltster need be apprehensive of overstocking the market, for, if the supply should exceed the consumption of the metropolis, the export bounty would carry off the redundancy to other markets less plentifully supplied, by every vessel leaving the port of Dublin, *most*

of

of which, under the present confined circumstances of our export trade, are obliged to take in BALLAST instead of a CARGO OF MERCHANDISE.

A few words may be sufficient to shew, that we have a market at our doors, for a great portion of the corn we may raise in Ireland, if the measures herein proposed, should be carried into effect.

Though the agriculture of Great Britain has been considerably improved and extended within the last thirty years, yet the progress of its extension has not borne an equal proportion to the growth of its manufactures, and the encrease of its population within that period;—the consequence of which is, that Britain, which formerly exported considerable quantities of grain, has, for many years past, been under the necessity of making very large annual importations.——England has at length reciprocated the Irish corn law, and given us the pre-occupation of her market, in the same manner as Mr. Foster's corn law passed in 1783, offered a preference in ours to the corn of Great Britain.—That is to say, England allows the importation of Irish wheat when the price in England is above 1*l.* 11*s.* 11*d.* per barrel, and of Irish oats and oaten meal when the price in England is above 11*s.* 2*d.* per barrel; whereas the importation of wheat and oats, the produce of every other country, is prohibited by a heavy duty, to be imported into England, until the price of the former rises to 1*l.* 13*s.* 3*d.* per barrel, and the price of the latter to 11*s.* 10*d.* $\frac{1}{2}$ per barrel.* With this decided preference in our favour, it will be the fault of the
Irish

* Those several sums are calculated in Irish currency.

Irish Legislature, if this country is not enabled, in the course of a few years, to supply the whole of the corn imported into Britain, because nothing more than the extension of Inland Navigation, and granting the export bounty from the port of Dublin, is necessary to be done, in order completely to effect this object. How important a one it is to the interests of Ireland, will more clearly appear by a short statement of facts, than from any arguments that can be adduced on the subject.

AVERAGE ACCOUNT of the IMPORTATION of CORN into Great Britain for fourteen Years, from 5th January 1771, to 5th January 1784 inclusive, taken from an Account published by Mr. J. J. Catherwood.

	Quarters.	Average price per quarter.	Average price per Irish barrel.	Annual value in English money.
		s. d.	s. d.	£. s. d.
Wheat and Flour,	167,565	45 8	30 5	382,610 1 8
Malt and Barley,	48,611	23 8	14 7	47,523 0 4
Oats and Oatmeal,	254,778	16 0	11 1	203,822 1 7
Rye,	17,210	30 3	21 9	26,030 2 6
Beans and Peas,	33,142	28 4	18 9	46,951 3 4

Total annual average value in English money,

£. 706,936 9 5

Being in Irish money,

— — — — —
£. 765,847 16 10

The medium weight of the English quarter, and the actual weight of the Irish barrel of the above denomination of grain, are as follow: viz.

	Wt. per quarter.	Wt. per Irish barrel.
Wheat, beans, peas and rye,	32½ fflones.	20 fflones
Barley,	28 —	16 —
Oats,	21½ —	14 —

The hurry with which I have thrown these facts and observations together, has not allowed me time to obtain an exact account of the imports of grain into Great Britain since the year 1784; but I have been assured by persons well acquainted with the subject, that the quantity of corn imported into that country within the last eleven years, exceeds the above average import more than one third part, which brings the value of this trade to upwards of *a million sterling per annum!* And indeed, the great increase in the single article of oats exported from Ireland into Great Britain within six years ending in 1793, more than confirms this rate of calculation, as may be seen by the following statement :

		<i>Barrels.</i>
In 1788, Oats exported to England and		
Scotland, - - -		274,056
1789, _____		320,282
1790, _____		472,746
1791, _____		661,643
1792, _____		612,171
1793, _____		632,836

By which it appears, that the export of oats to Great Britain, has been nearly *doubled* within this period.

Were I not afraid of tiring the reader by repetition, I would here again urge the policy of taking the only measures which can insure to Ireland the possession of so certain, so extensive
and

and encreasing a market for corn, as Great Britain, and to that country, the great advantage of a steady supply of grain at a moderate price.

The question is now fairly at issue, whether a great extension of Inland Navigation, and good public roads, together with a general export bounty, is not a better mode of improving the agriculture, manufactures, and commerce of Ireland, at the present period, than continuing the bounty on the carriage of corn to the Dublin market: That the latter cannot stand a moment in competition with the former, must be evident to every man of common understanding, even upon a cursory view of the subject. The benefits resulting from the bounties on the carriage of corn, end with the law which grants them, and the public must either relinquish those benefits or submit to a heavy *perpetual* charge.—On the contrary, the expense necessary to be incurred in order to form a general, cheap, and complete communication by land and water through all Ireland, is *limited*, at the same time that the benefits which must result from those improvements are *permanent*.

If we would supply the deficiency of corn in Britain, and become the granary of Europe, what should prevent us, after the rivers Shannon and Barrow are completely navigable, and a junction by the Grand Canal, made with the former, (as there is now with the latter), from adopting the mode which has enabled the Low Countries to be-

come both rich and populous, and to export such large quantities of grain annually?—A corn-factor at Ostend receives a commission for 10,000 barrels of wheat; he immediately dispatches a number of boats up the several canals, which intersect the whole country, and in the course of a few days, they bring down the quantity required, from warehouses which he has established at different places on the banks of the navigations.—If a corn-factor at Waterford, Limerick, or even Dublin, goes into the public market, and buys one, two, or three hundred barrels of corn, the price is immediately raised on him; if he continues to purchase a like quantity the next market day, the price is still further enhanced; and before he is enabled to provide one half the amount of the order, corn rises beyond the medium price of exportation, or exceeds the limited rate of his commission, and this benefactor to his country,* (for such I consider the corn merchant) is looked upon as *an avaricious and cruel forestaller of grain!*

How different would be the situation of our markets, were the system herein recommended, carried into effect.—The corn-factors would esta-

* “ After the business of the farmer, that of the corn-merchant is, in reality, the trade which, if properly protected and encouraged, would contribute the most to the raising of corn. It would support the trade of the farmer in the same manner as the trade of the wholesale dealer supports that of the manufacturer.”

An Inquiry into the Nature and Causes of the Wealth of Nations. Vol. 2d, page 356.

blish their warehouses on the banks of navigable rivers and canals, contiguous to principal market towns, where the farmer would find a constant and ready sale for his grain; this would produce a quick return, and the capital of the farmer would be employed solely in the business of agriculture, instead of being diverted, (as a very considerable part of it now is) into that of a carrier; nay more, the corn merchant would occasionally assist the farmer, by paying him part of the price of his grain in advance.—The business of freight or carriage would also be conducted separately, and thus labour would be perfectly divided, and three capitals employed in the advancement of agriculture, instead of one.

But it will be asked, do not the millers and maltsters in different parts of Ireland, assist the farmers in the very same manner which I propose, through the medium of corn factors? I acknowledge that in part they do so, with this essential difference, however, that there being at present but few, if any corn merchants, except the millers, and their operations being chiefly confined to the supply of the Dublin market, they enjoy a very lucrative, but prejudicial monopoly, against the farmer. When there are but few purchasers, combination is easy, and the proof is, that the millers set an arbitrary price on grain in every market town in Ireland.

In order to remedy this evil, I introduced a clause in the corn law already mentioned, in the year 1783, in order to encourage the establishment

of corn-factors; but there is great reason to apprehend, that until Inland Navigation is perfected to a considerable extent leading to the capital, and the export bounty is granted from the port of Dublin, every other effort to promote the corn trade of Ireland will be ineffectual.

The large sums annually expended on the inland and coast bounties, may be considered as a fund appropriated to the internal improvement of IRELAND.*

—It cannot therefore be imagined, that an Administration, which appears to have the welfare of this country so much at heart, should think of depriving the people of a fund, which may be considered as MORE PECULIARLY BELONGING TO THEMSELVES.—But if the foregoing facts and observations are founded in truth and policy, there can be little doubt, that the Parliament of Ireland will appropriate the amount of the inland and coast bounties to the extension of Inland Navigation, and also to facilitating the general communication by good roads throughout the kingdom.—Such a conduct will entitle the Parliament to the confidence and respect of the nation; and whatever burthens it may be found necessary to lay on the people, for our internal defence, or for the purpose of uniting heartily with Great Britain, to maintain the contest in which we are engaged with the common enemy, will be borne with chearfulness and alacrity.

If we compare the actual state of England and Ireland, in respect to agriculture, manufactures, and commerce, together with the heavy burthens
of

of the one, and the comparatively small taxes of the other, we shall find that no two countries were ever so fortunately circumstanced, to promote the welfare of each other.—It has been already observed, that the agriculture of England has not for many years past kept pace with the extension of her commerce and the increase of her population. The fresh accumulation of debt and taxes which she is daily incurring, must render it necessary for that country to apply her whole force to the further increase of manufactures and commerce, in order to enable her to support her burthens;—and this, I doubt not, she will be enabled to do by means of the large capitals and extensive colonies which she possesses; while Ireland, happy in the smallness of her debt, blessed with a fruitful soil and an improved agriculture, may, by means of an extensive internal navigation, furnish corn to millions of British manufacturers, on cheaper terms than it can be raised in a country, where arts and manufactures give a greater price for labour, than agriculture can afford.—There is but one obstacle to the pleasing prospect, namely, the tolls charged on the various English canals, through which, Ireland might furnish corn for the internal consumption of Britain.—This difficulty, however, is not insurmountable, as the Parliament of England might purchase off all tolls on corn at an expence, which might justly be deemed moderate, when compared with the extensive advantages resulting from such a measure.—But let me add, that Ireland should

be timely warned by the error of Great Britain in this respect, and by granting an adequate encouragement to Inland Navigation, secure the benefit of *low tolls on all the necessaries of life, and on the prime materials of manufacture.*

Here then would commence, a true reciprocity of interests between Great Britain and Ireland, the only solid bond of permanent friendship between nations. It is with these kingdoms as with mankind in general; when we quarrel with our neighbours, or are flighted by our pretended friends—and when disappointment and vexation overtake us, we look into the bosom of our nearest and dearest relatives for comfort and relief, and we are always more ready, under the pressure of misfortune, than in our more prosperous days, to consult their interest and happiness.—When the phantoms of ambition elude our grasp, when faithless allies renounce their engagements, and when the fickle goddess frowns upon us—one, and only one, wise and consolatory effort remains to be made to enable us to retrieve our misfortunes—and that is,—TO BIND MORE CLOSELY, BY MUTUAL ACTS OF FRIENDSHIP AND KINDNESS, THE AFFECTION OF TWO SISTER NATIONS, WHOSE INTERESTS ARE INSEPARABLE.

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